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Robertson  
Amelt



Attorney's Docket No.: 04860P2679

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Feierbach

Application No. 10/020,384

Filed: December 26, 2001

For: COOLING METHOD FOR ICS

Examiner: Tolin, Gerald P

Art Unit: 2835

FIRST CLASS CERTIFICATE OF MAILING

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on 2-27-03  
Date

*Carla Vignola*

Commissioner For Patents  
Washington, D.C. 20231-0001

RESPONSE AND AMENDMENT

Sir:

Applicant respectfully requests that the above-identified application be amended as follows:

IN THE SPECIFICATION:

Please amend the specification as follows.

Please replace paragraph number 0056 of page 19, with the following rewritten paragraph.

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--FIG. 9 is a cross-sectional view of another cooling device 900 having a wick 902 therein and having flexible channels 903A and 903B attached thereto, according to another embodiment of the invention. In FIG. 9, conduit 301 is positioned above IC's 910 and 911, which are mounted on a PCB 920. In this embodiment, conduit 301 is a heat pipe, e.g. a tubular structure containing a wick 902 and coupled with a reservoir 930. Reservoir 930 may be mounted on or within conduit 301, or may be external to conduit 301 as shown in FIG. 9. If external, a pump 932 and a connector (e.g. tube or hose) 933 may be provided to couple reservoir 930 with conduit 301. Reservoir 930 may contain a liquid coolant 931 such as water or similar coolants. The coolant 931 is conveyed by capillary action through wick 902 until it is vaporized by the heat transferred through flexible channels 903A and 903B from IC's 910 and 911 (or other electronic or electrical devices). As the vapor reaches cooler portions of heat pipe 301 (e.g. a heat sink attached to heat pipe 301), it cools, condenses, and the condensation is again conveyed by capillary action through wick 902 to flexible channels 903A and 903B.--

IN THE CLAIMS: /

Please cancel claims 36-41 without prejudice.

Following are the claims as amended herein and as are currently pending for consideration:

1. (Amended) A cooling device for removing heat from an integrated circuit, said cooling device comprising:
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a conduit;